04-20-07

Leve marginal

FORM PTO-2053-B (REV. 11/2000)

Approved for use through xx/xx/xxxx. OMB 0651-0031

U.S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

In	re	App	lication	of:	

09/82d,

Filing Date:

**Application No.:** 

April 10, 2001

Title:

Method and System For

Processing Telephone Calls.

Direct to:

Box Reconstruction United States Patent and Trademark Office Washington, DC 20231

NOTICE UNDER 37 CFR 1.251 - Pending Application

APR 25 2007

echnology Center 2600

# Statement (check the appropriate box):

The copy submitted with this reply is a complete and accurate copy of applicant's record of all of the correspondence between the Office and the applicant for the above-identified application (except for U.S. patent documents), and applicant is not aware of any correspondence between the Office and applicant for the above-identified application that is not among applicant's records.

☐ The copy of the paper(s) listed in the notice under 37 CFR 1.251 is/are a complete and accurate copy of applicant's record of such paper(s).

☐ The papers produced by applicant are applicant's complete record of all of the correspondence between the Office and the applicant for the above-identified application (except for U.S. patent documents), and applicant is not aware of any correspondence between the Office and the applicant for the above-identified application that is not among applicant's records.

☐ Applicant does not possess any record of the correspondence between the Office and the applicant for the above-identified application.

above-identified application.

Data

Signature

RCG. NO. 35,269

TOBA E. MARCETTE

Typed or printed name

### A copy of this notice should be returned with the reply.

Burden Hour Statement: This collection of information is required by 37 CFR 1.251. The information is used by the public to reply to a request for copies of correspondence between the applicant and the USPTO in order to reconstruct an application file. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 60 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

P.O. Box 1450

Alexandria, VA 22313-1450

Commissioner for Patent

### AMENDMENT TRANSMITTAL FORM

Department of Commerce nd Trademark Office **PATENT** 

Customer No.: 23696 Attorney Docket No.: PA190C1 In Re Application of: ZIV et al. Serial Number: 09/832,397

Filed: 04/10/2001

Examiner: TSULEUN R. LEI Group Art Unit: 2681

Dear Sir:

Fransmitted herewith for filing is a Response to Office Action in the above identified application.	
n addition, the following documents are enclosed:	
1. A Petition for Extension of Time: (1) month(s) is hereby requested.	
2. Information Disclosure Statement (IDS):	
a. PTO-1449	
b. Copies of IDS Citations (number of citations:	
3. Change of Attorney's Address in Application.	
4 C Oak	

CLAIMS  (a) Number Remaining After Amendment Previously I For		l	(c) Extra Claims	Large Entity Fee	Fee Paid	
Total*	10	27		0	x \$18 =	\$0.00
Independent**	3	3	3 0		x \$86 =	\$0.00
Multiple Depend	dent Claim(s):	Yes 🛭 No			\$290	\$0.00
		\$110	\$110.00			
EX	TENSION FEES	[	☐ Two Months ☐ Three Months ☐ After First Office Action		\$420	\$
		[			\$950	\$
INFORM	IATION DISCLOS	URE [			\$180	\$
	STATEMENT	Ī	After Final Office Action		\$130	. \$
	TERMINAL	\$110	\$			
		*If the number in column a is less than 20, enter 0 in column c. **If the number in column a is less than 3, enter 0 in column c.				

	Fee check in the amount of \$		
		is enclosed to pay for any claim and/or extension fe	

Fee check in the amount of \$\_\_\_\_\_ is enclosed to pay to. ...,

Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of \$\frac{110.00}{2}.

The Commissioner is hereby authorized to charge payment of any additional fees which may be required, or credifferent to said Deposit Account No. 17-0026. A duplicate of this sheet is enclosed for fee processing. 6. Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of \$110.00.

7. The Commissioner is further hereby authorized to charge to said Deposit Account No. 17-0026, pursuant to 37 CFR 1.25(b), any fee whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 EAYALEM1 00000051 170026 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

Date: 10/31/2003

Signature: Thien T. Nguyeh, Reg.No.

(858) 651-6137

QUALCOMM Incorporated Attn: Patent Department 5775 Morehouse Drive

San Diego, California 92121-1714

(858) 651-4125 Telephone:

Facsimile:

(858) 658-2502



STAMP HEREON ACKNOWLEDGES RECEIPT OF THE FOLLOWING IN THE U.S. PATENT AND TRADEMARK OFFICE (Mailed 10/31/2003):

**CUSTOMER NO.: 23696** DOCKET NO.: PA190C1

TTN/CNH

ENCLOSED ARE: AMENDMENT TRANSMITTAL LETTER (IN DUPLICATE);

AMENDMENT IN 9 PAGES; and POSTCARD.

APPLICANT: ZIV et al.

ASSIGNEE: QUALCOMM Incorporated APPLICATION NO.: 09/832,397

FILED: 04/10/2001

FOR: METHOD AND SYSTEM FOR PROCESSING TELEPHONE CALLS INVOLVING TWO DIGITAL WIRELESS SUBSCRIBER UNITS THAT AVOIDS DOUBLE VOCODING

STAMP HERE SHOWING RECEIPT (THANK YOU):



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

PLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/832,397	04/10/2001	Noam A. Ziv	PA190C1	8544	
23696 7:	590 07/01/2003				
Qualcomm In	•		EXAMI	NER	
Patents Departi 5775 Morehous		LEI, TSULEUN R			
San Diego, CA	92121-1714		ART UNIT	PAPER NUMBER	
			2681	Ç ==	
			DATE MAILED: 07/01/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

A B G		5-1
The trop	Application No.	A cant(s)
APR 1 8 2007	09/832,397	ZIV ET AL.
Office Action Summary	Examiner	Art Unit
Office Action Summary  The MAILING DATE of this communication app	TSULEUN R. LEI	2681
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	i6(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
1) Responsive to communication(s) filed on 10 A	<u>pril 2001</u> .	
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non-final.	
3) Since this application is in condition for allowa closed in accordance with the practice under a Disposition of Claims		
4) Claim(s) 1-27 is/are pending in the application	•	
4a) Of the above claim(s) is/are withdraw	vn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-27</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers		
9) The specification is objected to by the Examiner		
10) The drawing(s) filed on is/are: a) accep		
Applicant may not request that any objection to the		` '
11) The proposed drawing correction filed on		oved by the Examiner.
If approved, corrected drawings are required in rep		
Priority under 35 U.S.C. §§ 119 and 120	arrinier.	
13) Acknowledgment is made of a claim for foreign	priority under 25 U.S.C. \$ 110/a	) (d) or (f)
a) All b) Some * c) None of:	priority under 33 0.3.C. § 119(a	1)-(a) or (1).
1. Certified copies of the priority documents	have been received	
2. Certified copies of the priority documents		on No
3. Copies of the certified copies of the prior	• •	
application from the International Bur  * See the attached detailed Office action for a list of	eau (PCT Rule 17.2(a)).	•
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(	e) (to a provisional application).
a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti	* *	
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.	5) Notice of Informal I	/ (PTO-413) Paper No(s) Patent Application (PTO-152)
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)  Office Ac	tion Summary	Part of Paper No. 4

### DETAILED ACTION

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-3, 5-11, 13, 15-20, 22, 23 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lev et al. (U.S. Patent 5,608,779).

Regarding Claim 1, Lev teaches a method for processing a telephone call from a wireless subscriber unit that is part of a wireless telephone system, comprising: (a) receiving a request to make said telephone call to a receiving subscriber unit (Fig.5A, 501); (b)devocoding vocoded data from said wireless subscriber unit if said receiving subscriber unit is a wire-based subscriber unit (Fig.5A, 509); and (c) delivering said vocoded data to said receiving subscriber unit if said receiving subscriber unit is a wireless subscriber unit (Fig.5A, 503-508).

Regarding Claim 2, Lev teaches the method as set forth in claim 1 wherein said delivering includes: (c. 1) routing said vocoded data to said receiving subscriber unit within said wireless telephone system if said receiving subscriber unit is part of said wireless telephone

Application/Control Number: 09/832,397

Art Unit: 2681

system (Fig. 1; Col.3, Lines 24-26); and (c.2) routing said vocoded data through a long distance telecommunications system if said receiving subscriber unit is part of a second wireless telephone system (Fig. 2; Col.4, Lines 30-32).

Regarding Claim 3, Lev teaches the method as set forth in claim 2 wherein said routing said vocoded data through a long distance telecommunications system includes: establishing an all-digital link to said second wireless telephone system, and delivering said vocoded data to said second wireless system over said all-digital link (Fig.2, 221-223 and 241 & 242, Col.4, Lines 36-39 & Lines 51-53, the use of transcoders and T1 lines indicating this is an all-digital link).

Regarding Claim 5, Lev teaches the method as set forth in claim 3 wherein said all-digital link passes through a local public switched telephone network and a long distance telecommunications system (Fig.2).

Regarding Claim 6, Lev teaches the method as set forth in claim 1 further comprising: receiving a conference call request from said wireless subscriber unit directed to a third subscriber unit; converting said vocoded data from said wireless subscriber unit into combinable data; generating combined data by combining said combinable data and data from said third subscriber unit (Col.7, Lines 61-66); and generating combined vocoded data by vocoding said combined data and transmitting said combined vocoded data to said receiving subscriber unit (It is inherent in Fig.2, and from Col.7, Line 54 to Col.8, Line7 that after summing the combinable data, a vocoder pair is used for the receiving subscriber.).

Art Unit: 2681

Regarding Claim 7, Lev teaches the method as set forth in claim 6 wherein said combinable data is pulse code modulated data (Col.1, Lines 21-23, PCM is a non-compressed digital voice format.).

Regarding Claim 8, Lev teaches the method as set forth in claim 1 further comprising: detecting an incoming call to said wireless subscriber unit from a third subscriber unit; allocating signal processing resources to place data from said third subscriber unit into vocoded format if said third subscriber unit is part of another telephone system; and transmitting said data from said third subscriber unit to said wireless subscriber unit when call waiting is activated (Col.7, Line 66 to Col.8, Line 7).

Regarding Claim 9, see Claims 1 and 2 for Lev's teaching.

Regarding Claim 10, see Claim 3 for Lev's teaching.

Regarding Claim 11, see Claim 5 for Lev's teaching.

Regarding Claim 13, Lev teaches the cellular telephone system as set forth in claim 9 wherein said signal routing circuitry further comprises an interconnect subsystem (Fig.1 & Fig.2).

Page 5

Application/Control Number: 09/832,397

Art Unit: 2681

Regarding Claim 15, see Claim 6 for Lev's teaching.

Regarding Claim 16, see Claim 7 for Lev's teaching.

Regarding Claim 17, see Claim 8 for Lev's teaching.

Regarding Claim 18, see Claim 1 for Lev's teaching.

Regarding Claim 19, see Claim 2 for Lev's teaching.

Regarding Claim 20, see Claim 13 for Lev's teaching.

Regarding Claim 22, see Claim 3 for Lev's teaching.

Regarding Claim 23, see Claim 5 for Lev's teaching.

Regarding Claim 25, see Claim 6 for Lev's teaching.

Regarding Claim 26, see Claim 7 for Lev's teaching.

Regarding Claim 27, see Claim 8 for Lev's teaching.

Application/Control Number: 09/832,397 Page 6

Art Unit: 2681

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 4, 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lev in view of Roach, Jr. (U.S. Patent 5,845,211).

Regarding Claim 4, Lev teaches the method as set forth in claim 3 of an all-digital link. Lev is silent on the use of ATM network. Roach, however, teaches an ATM network as part of the PSTN network (Roach, Col.12, Lines 15-23). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching of ATM network of Roach to the teaching of Lev, so that the telephone network would contain all transmission modes. Lev as modified by Roach teaches the method as set forth in claim 3 wherein said all-digital link is an ATM network (Roach, Col.12, Lines 15-23).

Application/Control Number: 09/832,397 Page 7

Art Unit: 2681

Regarding Claim 12, Lev teaches the cellular telephone system as set forth in claim 10 wherein said all-digital connection is an asynchronous transfer mode network (Roach, Col.12, Lines 15-23).

Regarding Claim 24, Lev teaches the wireless telephone system as set forth in claim 23 wherein said all-digital connection is an asynchronous transfer mode network (Roach, Col.12, Lines 15-23).

# **Double Patenting**

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 9, 14 and 18-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 6,292,662. Although the conflicting claims are not identical, they are not patentably distinct from each other because

Art Unit: 2681

they all claim a method/system for processing a telephone call in a wireless telephone system interfacing with a wire-based telephone system, having vocoded voice data, to devocode vocoded data if the receiving subscriber unit is a wire-based telephone unit, and to bypass the devocoding process if the receiving subscriber unit is part of the wireless telephone system.

Regarding Claim 9, Ziv teaches a cellular telephone system for processing a telephone call from a requesting subscriber unit that is part of a wireless telephone system directed to a receiving subscriber unit comprising: signal routing circuitry; signal processing circuitry for processing vocoded data; and a call control processor, coupled to said signal processing circuitry and said signal routing circuitry, for configuring said signal routing circuitry to bypass said signal processing circuitry if said receiving subscriber unit is part of said cellular telephone system, and for configuring said signal processing circuitry to devocode said vocoded data if said receiving subscriber unit is wire-based (Ziv, Claim 3, Col. 10, Line 48-63).

Regarding Claim 14, Ziv teaches the cellular telephone system as set forth in claim 9 wherein said call control processor configures said signal processing circuitry to convert said vocoded data into tones if said receiving subscriber unit is part of a second wireless telephone system, and configures said signal routing circuitry to deliver said tones to a long distance telecommunications carrier (Ziv, Claim 3, Col. 10, Line 63 to Col. 11, Line 6).

Regarding Claim 18, Ziv teaches a wireless telephone system for processing a telephone call from a requesting subscriber unit that is part of a wireless telephone system directed to a

Art Unit: 2681

receiving subscriber unit comprising: means for routing digital information; means for processing vocoded data; and means for configuring said means for routing to bypass said means for processing if said receiving subscriber unit is part of said wireless telephone system, and for configuring said means for processing to devocode said vocoded data if said receiving subscriber unit is wire based, said means for configuring being coupled to said means for processing and said means for routing (Ziv, Claim 3, Col. 10, Line 48-63).

Regarding Claim 19, Ziv teaches the wireless telephone system of claims 18 wherein said means for configuring configures said means for routing to route said vocoded data to said receiving subscriber unit within said wireless telephone system if said receiving subscriber unit is part of said wireless subscriber system, and to route said vocoded data through a long distance telecommunication service if said receiving subscriber unit is part of a second wireless telephone system (Ziv, Claim 3, Col. 10, Line 48 to Col. 11, Line 6).

Regarding Claim 20, Ziv teaches the wireless telephone system as set forth in claim 19 wherein said means for routing comprises an interconnect subsystem (Ziv, Claim 3, Col. 10, Line 48 to Col.11, Line 6).

Regarding Claim 21, Ziv teaches the wireless telephone system as set forth in claim 20 wherein said means for configuring configures said means for processing to convert said vocoded data into tones, and configures said means for routing to deliver said signal to a long

Application/Control Number: 09/832,397

Art Unit: 2681

Page 10

distance telecommunications carrier, if said receiving subscriber unit is part of a second wireless telephone system (Ziv, Claim 3, Col.10, Line 63 to Col.11, Line 6).

### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weaver, Jr. et al. (U.S. Patent 5,956,673)

Han et al. (U.S. Patent 5,793,810)

Henderson et al (U.S. Patent 5,854,786)

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TSULEUN R. LEI whose telephone number is 703-305-4828.

The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D Bost can be reached on 703-305-4778. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5403 for regular communications and 703-308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TRL

June 24, 2003

/

# Application/Control No. O9/832,397 Examiner Applicant(s)/Patent Under Reexamination ZIV ET AL. Art Unit Page 1 of 1

2681

# U.S. PATENT DOCUMENTS

TSULEUN R. LEI

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name ·	Classification
	Α	US-5,608,779	03-1997	Lev et al.	455/436
	В	US-5,845,211	12-1998	Roach, Jr., Peter O.	455/436
	С	US-6,292,662	09-2001	Ziv et al.	455/445
	D	US-5,956,673	09-1999	Weaver et al.	704/221
	Ę	US-5,793,810	08-1998	Han et al.	375/242
	F	US-5,854,786	12-1998	Henderson et al.	370/335
	G	US-			
	Н	US-			
	1	US-			
	J	US-			
	K	US-			
	L	US-			
	М	US-			

### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	Z					
	0					
	Р					
	Q					
	R			,		
	S				,	
	Т					

### **NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	٧	
	w	
	x	

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited

DATE MAILED: 04/10/2001	(REV. 7-80)	CPATE	U.S. DEPARTMENT OF CO ENT AND TRADEMARK OF I DISCLOSURE	OMMERCE FICE	PA190C		APPLICAT UNKNO		P. 074
ZIV, ET AL.   FILING DATE   GROUP   UNKNOWN   FILING DATE   HEREWITH   UNKNOWN   FILING DATE   HEREWITH   UNKNOWN   FILING DATE   HEREWITH   UNKNOWN   FILING DATE   HEREWITH   UNKNOWN   FILING DATE   NAME   CLASS   SUB   DATE   CLASS   SUB   DATE   CLASS   CLA					APPLICAN <sup>*</sup>	Т			28
DATE MAILED: 04/10/2001	(000 007072	11 311001	3 II Necessary)				·		200
U.S. PATENT DOCUMENTS   STAND   DOCUMENT NUMBER   DATE   NAME   CLASS   SUB   DATA   APP   PRIV.	DATE MA	ILED:	04/10/2001				1		99
DOCUMENT NUMBER   DATE   NAME   CLASS   SUB DATE   NAME   CLASS   SUB DATE   DATE   NAME   CLASS   SUB DATE   DA				IIS PA			JUNKNO	<u>WN</u>	7.1
TC			DOCUMENT NUMBER				CLASS		FILING DATE I APPRO PRIAT
TC   A3   5,577,029   11/19/1996   Lu, et al.     TC   A4   5,526,400   06/11/1996   Nguyen     TC   A5   5,509,004   04/16/1996   Bishop, Jr. et al.     TC   A6   5,504,804   04/02/1996   Widmark, et al.     TC   A7   5,278,892   01/11/1994   Bolliger, et al.     TC   A8   5,173,933   12/22/1992   Jabs, et al.     TC   A9   4,187,398   02/05/1980   Stark     A10	16	A1	4,782,326	11/1988	Bush				
TC   A3   5,577,029   11/19/1996   Lu, et al.     TC   A4   5,526,400   06/11/1996   Nguyen     TC   A5   5,509,004   04/16/1996   Bishop, Jr. et al.     TC   A6   5,504,804   04/02/1996   Widmark, et al.     TC   A7   5,278,892   01/11/1994   Bolliger, et al.     TC   A8   5,173,933   12/22/1992   Jabs, et al.     TC   A9   4,187,398   02/05/1980   Stark     A10   FOREIGN PATENT DOCUMENTS    EXAMINER   Ref   INITIAL   No   DOCUMENT NUMBER   DATE   COUNTRY   NAME   CLASS   SU CLA     TC   B1   0664658   07/26/1995   EPO   AT&T CORP.     TC   B2   0605311   07/06/1994   EPO   Alcatel Radiotelephone     TC   B3   9515665   06/08/1995   PCT   Motorola Inc.     TC   B4   9524789   09/14/1995   PCT   NOKIA     TC   B5   9642176   12/27/1996   PCT   QUALCOMM, Inc.     TC   B6   9300778   01/1993   PCT   GPT Limited     OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	16	A2	5,317,567	05/1994	Champion				
A4         5,526,400         06/11/1996         Nguyen           A5         5,509,004         04/16/1996         Bishop, Jr. et al.           A6         5,504,804         04/02/1996         Widmark, et al.           A7         5,278,892         01/11/1994         Bolliger, et al.           A8         5,173,933         12/22/1992         Jabs, et al.           A9         4,187,398         02/05/1980         Stark           A10         FOREIGN PATENT DOCUMENTS           EXAMINER INITIAL         No         DOCUMENT NUMBER         DATE         COUNTRY         NAME         CLASS         SUCLA           T         B1         0664658         07/26/1995         EPO         AT&T CORP.         Alcatel Radiotelephone           T         B2         0605311         07/06/1994         EPO         Alcatel Radiotelephone           T         B3         9515665         06/08/1995         PCT         Motorola Inc.           T         B4         9524789         09/14/1995         PCT         OUALCOMM, Inc.           T         B6         9300778         01/1993         PCT         GPT Limited           OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	TC	АЗ	5,577,029						
## A5 5,509,004	1	A4							
H         A6         5,504,804         04/02/1996         Widmark, et al.           H         A7         5,278,892         01/11/1994         Bolliger, et al.           H         A8         5,173,933         12/22/1992         Jabs, et al.           A9         4,187,398         02/05/1980         Stark           A10         FOREIGN PATENT DOCUMENTS           EXAMINER INITIAL         Ref INITIAL         No         DOCUMENT NUMBER         DATE         COUNTRY         NAME         CLASS         SU CLA           TL         B1         0664658         07/26/1995         EPO         AT&T CORP.         Alcatel Radiotelephone           TL         B2         0605311         07/06/1994         EPO         Alcatel Radiotelephone         TOWNIA           TL         B4         9524789         09/14/1995         PCT         Motorola Inc.         TOWNIA           TL         B5         9642176         12/27/1996         PCT         QUALCOMM, Inc.           TL         B6         9300778         01/1993         PCT         GPT Limited           OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	K	A5				<del></del> -			
A7   5,278,892   01/11/1994   Bolliger, et al.	K	A6					-		
A8   5,173,933   12/22/1992   Jabs, et al.   A9   4,187,398   02/05/1980   Stark   A10   FOREIGN PATENT DOCUMENTS	t	A7							-
A9    4,187,398	H	1							<u> </u>
A10	K	1							
FOREIGN PATENT DOCUMENTS  EXAMINER INITIAL Ref No DOCUMENT NUMBER DATE COUNTRY NAME CLASS SU CLA  TL B1 0664658 07/26/1995 EPO AT&T CORP.  TL B2 0605311 07/06/1994 EPO Alcatel Radiotelephone  TL B3 9515665 06/08/1995 PCT Motorola Inc.  TL B4 9524789 09/14/1995 PCT NOKIA  TL B5 9642176 12/27/1996 PCT QUALCOMM, Inc.  TL B6 9300778 01/1993 PCT GPT Limited  OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	<del></del>			02/00/1000	Otalk				
No   DOCUMENT NUMBER   DATE   COUNTRY   NAME   CLASS   SUCLA	ψ.,÷	17,770		FOREIGN	PATENT DOC	UMENTS			
Heat         Description			DOCUMENT NUMBER	DATE	COUNTRY	NAN	ΛE	CLASS	SUB CLASS
TC         B2         0605311         07/06/1994         EPO         Alcatel Radiotelephone           TC         B3         9515665         06/08/1995         PCT         Motorola Inc.           TC         B4         9524789         09/14/1995         PCT         NOKIA           TC         B5         9642176         12/27/1996         PCT         QUALCOMM, Inc.           TC         B6         9300778         01/1993         PCT         GPT Limited           OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	Th	B1	0664658	07/26/1995	EPO	AT&T CORP.			
TL         B3         9515665         06/08/1995         PCT         Motorola Inc.           TL         B4         9524789         09/14/1995         PCT         NOKIA           TL         B5         9642176         12/27/1996         PCT         QUALCOMM, Inc.           TL         B6         9300778         01/1993         PCT         GPT Limited           OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	K						elephone		 
T	Th								
TL   B5   9642176   12/27/1996   PCT   QUALCOMM, Inc.   TL   B6   9300778   01/1993   PCT   GPT Limited   OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	$\mathcal{I}$	В4							******
B6 9300778 01/1993 PCT GPT Limited  OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	TL	B5					Inc.		
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Page, Etc.)	Th	B6							
							nt Page, Etc.	<u>.</u> .)	<del></del>
"Intelligibility Testing of the Continuous Variable Slope Delta (CVSD) Coder-Decoder (CODEC),"  Elis D. Hanson; Research and Development Technical Report ECOM-3393, February 1971.	t	C1	"Intelligibility Testing	g of the Conti	nuous Variable S	Slope Delta (CV	SD) Coder-De	ecoder (C	-

The Was	15									
KR 18 JUL	* COFFIG							Sheet_	_1_ of _1_	
ATENT & TR	БОЙМ РТО-1 (ЙЕV. 7-80)	449 U PATEN	.S. DEPARTMENT OF CO IT AND TRADEMARK OFF	MMERCE	ATTY. DOCK		APPLICATI JNKNO\	ON NO.		
			DISCLOSURE		ADDUCANT					
	(Use several s		' APPLICANT if necessary)		APPLICANT	•				
					ZIV, ET A		GROUP			
	DATE MAIL	.ED: (	04/10/2001		HEREWITH	1	JNKNO\	WNI .		
				U.S. PA	TENT DOCUMI		3141404	0074		
	EXAMINER Ref INITIAL No DOCUMENT NUMBER				N	IAME	CLASS	SUB CLASS	FILING DATE IF APPRO- PRIATE	
		A1	4,782,326	11/1988	Bush					
		A2	5,317,567	05/1994	Champion					
		А3	5,577,029	11/19/1996	Lu, et al.					
		A4	5,526,400	06/11/1996	Nguyen					
		A5	5,509,004	04/16/1996	Bishop, Jr. et al					
	A6 5,504,804  A7 5,278,892  A8 5,173,933  A9 4,187,398  A10			04/02/1996	Widmark, et al.					
				01/11/1994	Bolliger, et al.					
				12/22/1992	Jabs, et al.					
				02/05/1980	Stark					
						2007 (20				
				FOREIGN	PATENT DOCU	JMENTS				
	EXAMINER INITIAL	Ref No	DOCUMENT NUMBER	DATE	COUNTRY	NAME	Ē	CLASS	SUB CLASS	
		B1	0664658	07/26/1995	EPO	AT&T CORP.				
		B2	0605311	07/06/1994	EPO	Alcatel Radiotel	lephone			
		вз	9515665	06/08/1995	PCT	Motorola Inc.				
		В4	9524789	09/14/1995	PCT	NOKIA				
	B5 9642176			12/27/1996	РСТ	QUALCOMM, Ir	nc.			
		В6	9300778	01/1993	PCT	GPT Limited				
•			OTHER PRIOR A	ART (Includin	g Author, Title,	Date, Pertinent	Page, Etc	.)		
		C1	"Intelligibility Testin	g of the Conti	nuous Variable S	Stope Delta (CVS	D) Coder-De	ecoder (C	ODEC)," by	
			Elis D. Hanson; <u>Re</u>	search and D	evelopment Tech	nical Report EC	<u>ОМ-3393,</u> F	ebruary 19	971.	
		СЗ								
	EXAMINER				DATE CONSI					
			f reference considered, who nd not considered. Include					hrough cita	tion if	